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Greater Victoria Chamber of Commerce

Offshore Forum

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Victoria

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Future Demand and Supply

- Forecasts indicate clear need for hydrocarbons + clean energy
- Global growth average 1.7% to 2030
- Hydrocarbons remain primary energy
- Natural gas demand growing
- Technology and science are not a barrier to new hydrocarbon sources

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•Supply and demand forecasts indicate a clear need for new oil and gas resources, notwithstanding the growth in clean energy.

•According to International Energy Agency's (IEA's) 2002 forecast, global primary energy demand will grow at an average annual rate of 1.7% between 2000 and 2030, compared to 2.1% over the past three decades.

•Hydrocarbons will remain the primary sources of energy, accounting for around 90% of demand growth and about the same share of total requirements in 2030.

•This is demonstrated in the following graphs

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BC Perspective

Case for Advancement

- National, Continental, Global Supply and Demand
- Natural resources left in the ground lose value
- Heartlands Strategy
- Energy Plan
- Coastal Economic Diversification
- Sound Science

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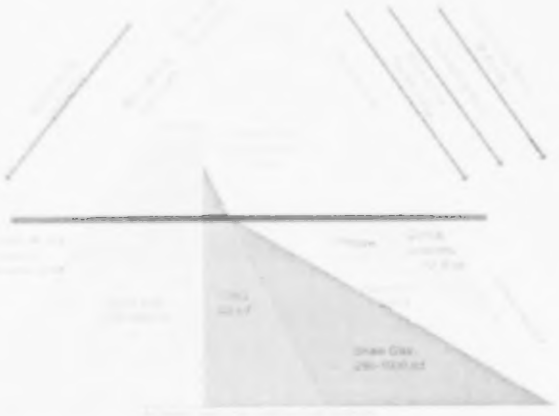
Development of BC offshore oil and gas holds tremendous potential to add to government revenues that support health care, education, and other vital public services; contribute to energy self-sufficiency and security; provide unique partnership opportunities with First Nations, and generate prospects for jobs and training and businesses and investment.

The BC Heartlands Economic Strategy is aimed at revitalizing regional resource-based economies that have lagged behind the metropolitan southwest economy.

In November 2002, the Province released *Energy for our Future: A Plan for BC*, outlining a series of actions to help revitalize the provincial economy through responsible energy development and use. One of the plan's four cornerstones is a secure and reliable supply of energy. The Energy Plan's fourth cornerstone is environmental responsibility.

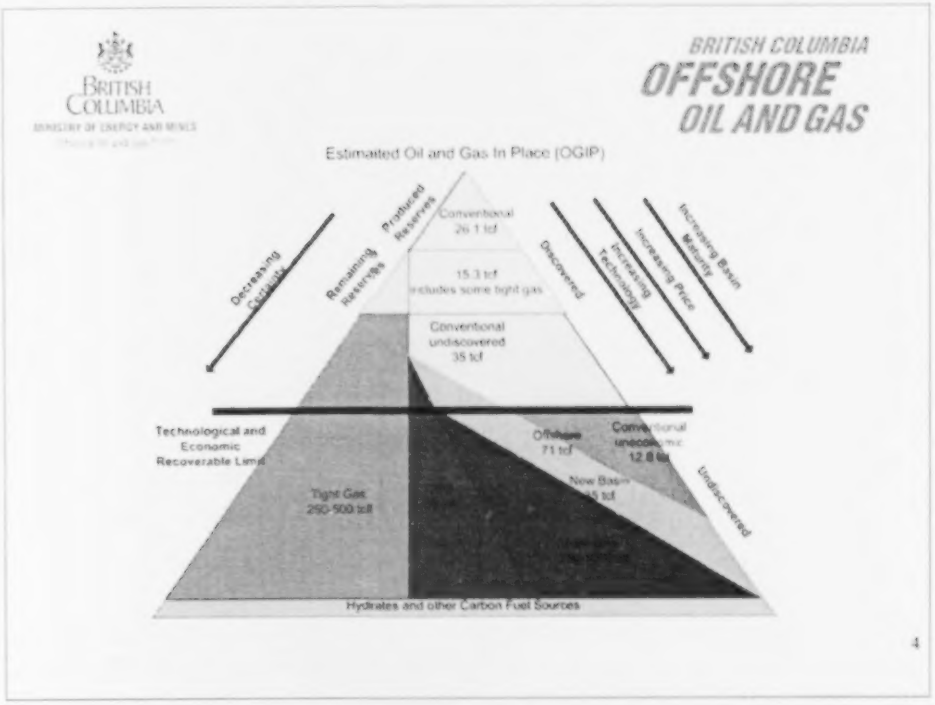
The question of lifting the moratorium on offshore oil and gas activity is clearly not one of science, but rather one of public policy.

All scientific studies commissioned by both the federal and provincial governments in the last three years have made this clear.



As demand grows and supply decreases, price increases combined with better technology, will make currently uneconomical resources at the bottom of the triangle viable.

However, even with higher prices and improved technology, the certainty of finding economic resources increases.



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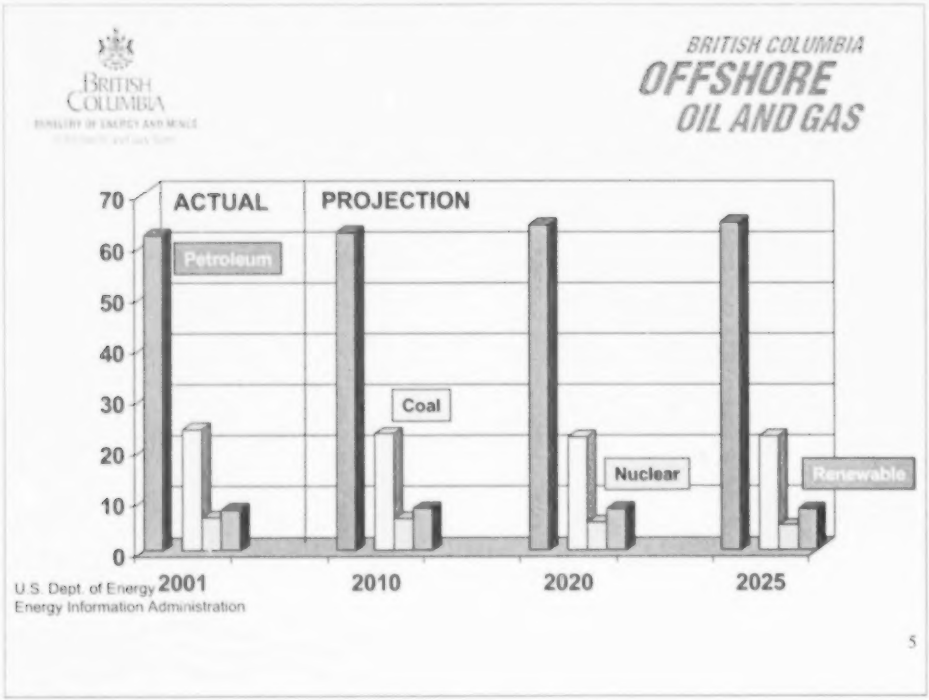
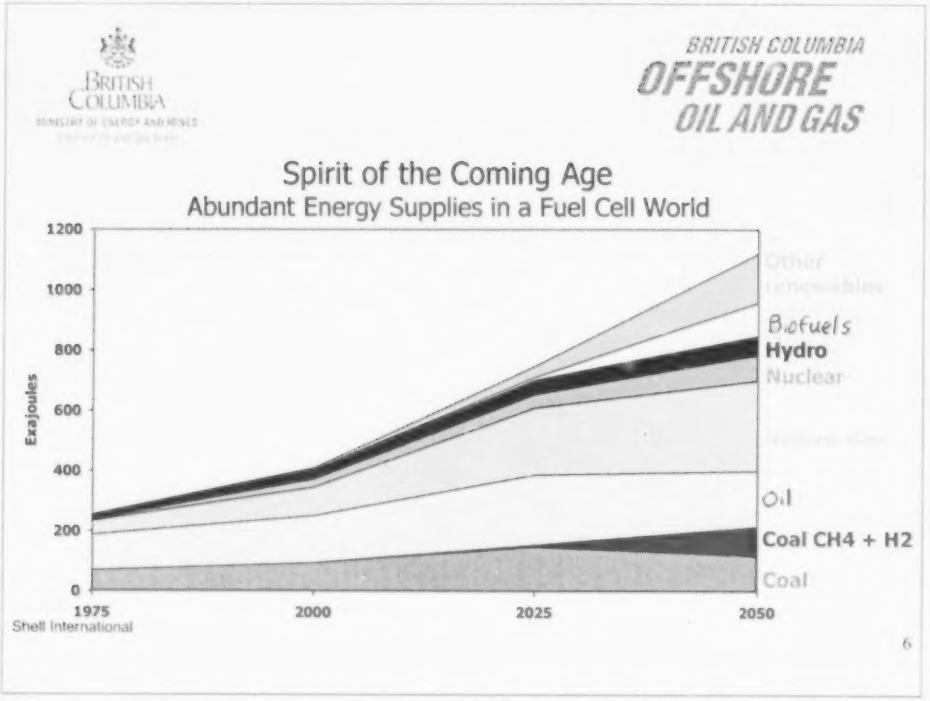


Globally and provincially, the use of clean, alternative energy resources is rising but is not expected to reach a major share of total energy supply for a number of decades.

The graph illustrates projected energy percentage by source out to 2025.

This sentiment has been echoed by Michael Moore, Chief Economist of the US National Renewable Energy Laboratories –

> *"In the future – 40 to 50 years out, as opposed to 10 years out – renewables will probably have a greater effect in stabilizing a corner of the market, probably about 25 percent."*



In the case of world energy demand, the IEA expects non-hydro renewables to grow the fastest of all energy resources – at 3.3% annually over the next 30 years – but these renewables will still only account for a projected 4% of total demand by 2030.

In fact, in the near term, natural gas will remain the least expensive feed stock for hydrogen production for the fuel cell.

Again, this sentiment is echoed by Geoffrey Ballard, Chairman, General Hydrogen Corporation –

> *"Although it is of great interest to society to reduce the amount of oil burned in internal combustion engines, studies of the advent of fuel cell cars, even using a very aggressive scenario, indicate that the use of oil will continue to increase for the next 30 years. After the gradual decline of oil for transportation, there will be a healthy demand for oil as a petrochemical feedstock."*

Canadian energy needs are forecast to rise at an average rate of 1.4% annually through 2025.

At the same time, crude oil is imported from overseas to satisfy more than half of domestic refinery requirements.

British Columbia currently produces approximately 14 million barrels and imports about 41 million barrels annually.

The next slide illustrates that BC has a number of prospective basins outside of the Northeast where development continues.

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MINISTRY OF ENERGY AND MINES

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Offshore Petroleum Potential in British Columbia

This map displays that the areas offshore British Columbia that are currently under tenure.

These tenures date back to the 1960's.

They are currently "suspended" by the moratoria.

Since 2001 the provincial government has commissioned an offshore technology update, an independent scientific review, as well as canvassed the views of coastal communities.

The Offshore Oil and Gas Team builds upon those actions and continues to actively engage coastal communities as well as research relevant regulatory and management considerations.

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Offshore Team
•Established in January 2003 to Enable Offshore Oil and Gas Development to Occur in British Columbia in a Scientifically Sound and Environmentally Responsible Manner
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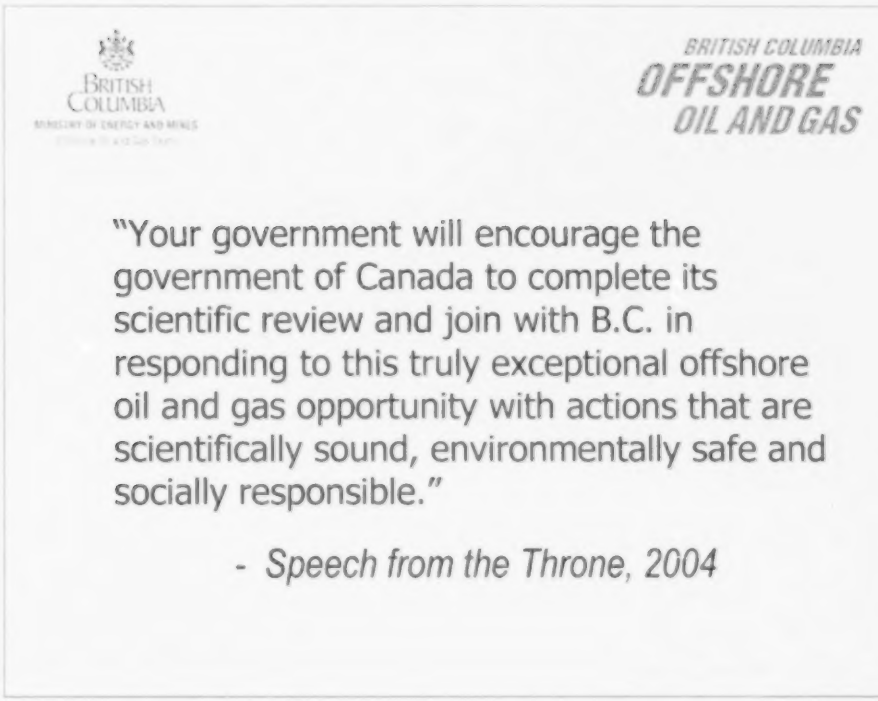
One policy action of the 2002 Energy plan called for the establishment of a dedicated team to advance offshore oil and gas.

The team is lead by Deputy Minister Jack Ebbels, who reports to the Honourable Richard Neufeld, Minister of Energy and Mines.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"Your government will encourage the government of Canada to complete its scientific review and join with B.C. in responding to this truly exceptional offshore oil and gas opportunity with actions that are scientifically sound, environmentally safe and socially responsible."
- Speech from the Throne, 2004
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Lifting the federal moratorium would support major provincial policy initiatives and provide British Columbia with the opportunities available to other Canadian jurisdictions in exploring for and developing offshore resources.

The Province has set a clear policy direction for the responsible development of BC offshore oil and gas resources.

The Federal government has followed a three stage process resulting in the scientific conclusions in the next slide.

The Scientific Review Panel reported in February, 2004.

Reports from the federal public and First Nation engagements are expected this fall.

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Federal Process: Royal Society
Conclusions
•Provided an adequate regulatory regime is in place, there are no science gaps that need to be filled before lifting the moratoria on oil and gas development
• The present restriction on tanker traffic ... should be maintained for the time being.
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This conclusion echoes that of that of the Provincial independent science review.

The Royal Society also identified a series of scientific studies that would support responsible development.

The Province appreciates that lifting of the federal moratorium on BC offshore activity, while crucial, is only the first of a series of steps that must be taken.

Since the establishment of the Offshore Oil and Gas Team in January 2003, the Province has launched a comprehensive plan to achieve its goal of scientifically sound and environmentally responsible exploration and development.

The Province is taking a principled approach to addressing these topics.

The Province believes a management and regulatory regime must be comprehensive, dealing with all aspects of offshore exploration and development, including the establishment of fiscal arrangements (e.g., royalties and taxes); initial decisions to open areas for exploration; granting of exploration rights and tenures; environmental assessments of all proposed offshore activities; approval of development plans; establishment and monitoring of operational health, environment and safety requirements; and decommissioning and reclamation.

A single window regime is the best means of ensuring effectiveness, efficiency and accountability.

The Province believes that BC offshore activities should be governed by a single, independent agency, with regulatory rules that are clear, predictable and effective in balancing regulatory effectiveness with operational practicality.

The province is also contemplating the role of an advisory body in offshore development.

A clear and predictable tenure regime is crucial for industry considering investment in the BC offshore.

The Province believes that an offshore tenure regime must promote timely and responsible development, and provide certainty to tenure holders.

In addition, it will be necessary to design transitional arrangements regarding the existing tenure interests.

The Province believes that a critical step to ensuring that exploration and development is conducted in a scientifically sound and environmentally responsible manner is the effective and timely assessment of proposed activities.

This assessment must be tailored to the specific circumstance of the offshore activity and done in an integrated and coordinated fashion to avoid needless duplication of effort and expense.

From the Province's perspective, the environmental assessment process must address the full scope of offshore oil and gas activities.

The assessment must include consideration of how to ensure that offshore oil and gas activities co-exist with other ocean users.

Provisions within a management and regulatory regime must consider local community enjoyment of benefits that are commensurate to the risk assumed as well as full and prompt compensation for losses by the responsible party.

The fiscal regime must also ensure the Province receives a fair return from the development of publicly owned resources, and also create a fiscal environment that encourages private sector investment.

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First Nations
•The Provincial Government Must Meet Its Obligations Regarding First Nations' Rights and Interests
•Work with First Nations on Community Information Needs
•Role in Decision Making
•Share in Benefits
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First Nations have unique interests, including constitutionally recognized rights, which must be addressed by government in the course of developing an offshore industry.

The Province believes that offshore development provides a opportunity to develop new, innovative and effective means of addressing First Nations interests, and is committed to working in collaboration with First Nations to do so.

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Coastal Communities/Local Benefits
•Contribute to Strong, Healthy and Vibrant Economy
•Government Must Consider the Views of Coastal Residents
•Support Innovation and Development in Marine and Leading Edge industries
•Co-exist with Other Ocean Sectors
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The Province holds firm to the principle that the benefits of offshore development must contribute to the well being of coastal communities.

In practice the Province is preparing to begin discussions with First Nations, coastal communities and key stakeholders on management and regulatory approaches, and on First Nation roles in these processes

British Columbia currently has a number of companies that service the global offshore industry. Many of these services are in the high tech, marine, engineering and environmental consulting fields.

The Province believes that these industries can grow, advancing the development of these sectors.

Coastal communities have considerable experience with other natural resource industries and the Province believes that many of these services and skills can be transferred to the offshore industry as well.

The offshore industry around the world is experienced in working with other ocean based industries. This can also happen in B.C.

This is a 1966 picture of the Sedco 135F in Victoria harbour where it was built. The Sedco was the first complete offshore rig to be built in Canada and had a 1967 price tag of $10.5 million.

The rig drilled 14 wells along BC's coast between 1966 and 1968.